CLAIMS

The invention claimed is:

1. An intelligent media gateway for providing telephone call features to an analog telephone using packet-switched telephony, said intelligent media gateway comprising:

at least one broadband connection for receiving and transmitting digital data corresponding to inbound and outbound telephone calls, respectively, wherein said digital data includes telephone call data and voice data;

at least one telephone interface for receiving and transmitting analog voice signals corresponding to said inbound and said outbound telephone calls;

a call processing system for processing said inbound and outbound telephone calls and for converting between said voice data and said analog voice signals, said call processing system including an intelligent call agent for managing said telephone calls according to said telephone call data and user defined rules; and

a user interface system for providing a user interface for configuring said intelligent call agent and for creating said user define rules.

2. The intelligent media gateway of claim 1 further comprising at least one computer interface for receiving computer signals and for interacting with said user interface system to provide said user interface.

3. The intelligent media gateway of claim 2 wherein said at least one computer interface includes at least one LAN interface.

4. The intelligent media gateway of claim 1 wherein said broadband connection supports data rates greater than about 200 kbps.

5. The intelligent media gateway of claim 1 wherein said processing system includes a digital signal processor for converting between said voice data and said analog voice signals.

6. The intelligent media gateway of claim 4 wherein said digital signal processor converts between said analog voice signals and said voice data using voice over IP (VoIP).

7. The intelligent media gateway of claim of claim 5 wherein said processing system includes a central processing unit (CPU) for coordinating the processing of said inbound and outbound telephone calls.

8. The intelligent media gateway of claim 1 wherein said user interface system includes an embedded web server for generating web pages to provide said user interface.

9. The intelligent media gateway of claim 1 wherein said user defined rules include at least one rule for forwarding inbound telephone calls.

10. The intelligent media gateway of claim 1 wherein said user defined rules include at least one rule for restricting outbound telephone calls.

11. The intelligent media gateway of claim 1 wherein said user defined rules include at least one rule for mapping inbound telephone calls to different types of rings.

12. The intelligent media gateway of claim 1 wherein said user defined rules include at least one rule for enabling call waiting.

13. The intelligent media gateway of claim 1 wherein said telephone interface is a plain old telephone service (POTS) interface.

14. The intelligent media gateway of claim 1 wherein said user interface system is an interactive voice response (IVR) system.

15. A method of managing packet-switched telephone calls, said method comprising the steps of:

providing call handling rules on a media gateway for handling inbound and/or outbound telephone calls;

providing a user interface to said media gateway for configuring said call handling rules;

when an invitation to accept at least one inbound telephone call using packet-switched telephony is received, consulting said call handling rules on said media gateway to determine how said inbound telephone call is handled; and

processing said inbound telephone call based on said call handling rules.

16. The method of claim 15 wherein the step of providing a user interface includes displaying web pages.

17. The method of claim 15 wherein said call handling rules include at least one rule for forwarding inbound telephone calls, and wherein the step of processing said inbound telephone call includes forwarding said inbound telephone call based upon inbound caller ID information.

18. The method of claim 15 further comprising the step of: when an outbound telephone call is placed, consulting said call handling rules to determine how said outbound telephone call is handled.

19. The method of claim 18 wherein said user defined rules include at least one rule for restricting outbound telephone calls based upon an outbound dialed number.

20. The method of claim 15 wherein said user defined rules include at least one rule for mapping inbound telephone calls to different types of rings, and wherein the step of processing said inbound telephone call includes generating a ring tone for said inbound telephone call based upon inbound caller ID information.